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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/533,392	04/29/2005	Tetsuroh Nakamura	2005-0717A	1434	
513	7590 08/13/2007 I, LIND & PONACK, L.L.P.		EXAM	IINER	
2033 K STREET N. W.			AL HASHII	AL HASHIMI, SARAH	
SUITE 800. WASHINGTON, DC 20006-1021			ART UNIT	PAPER NUMBER	
	•		2853		
			MAIL DATE	DELIVERY MODE	
			08/13/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.	Applicant(s)			
		10/533,392	NAKAMURA ET AL.			
		Examiner	Art Unit			
		Sarah Al-Hashimi	2853			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.						
 Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 						
Status						
1)⊠	Responsive to communication(s) filed on <u>21'May 2007</u> .					
2a)⊠	This action is FINAL . 2b) ☐ This	s action is non-final.				
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Dispositi	on of Claims					
4) 🖂	4) Claim(s) 44-82 is/are pending in the application.					
	4a) Of the above claim(s) <u>54-82</u> is/are withdrawn from consideration.					
· · · · · · · · · · · · · · · · · · ·	5) Claim(s) is/are allowed.					
	Claim(s) <u>44-53</u> is/are rejected.					
	7) Claim(s) is/are objected to.					
ا_(ه	Claim(s) are subject to restriction and/o	or election requirement.				
Applicati	on Papers	•				
9)[The specification is objected to by the Examine	er.				
10)	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)[_]	The oath or declaration is objected to by the Ex	xaminer, Note the attached Office	Action or form PTO-152.			
Priority (ınder 35 U.S.C. § 119					
	Acknowledgment is made of a claim for foreigr	priority under 35 U.S.C. § 119(a))-(d) or (f).			
a)	a)⊠ All _ b)□ Some * c)□ None of:					
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
	det the distance detailed embe design for a list of the defining depice het rederved.					
Attachmen	t(s)					
	e of References Cited (PTO-892)	4) Interview Summary	(PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application						
	mation Disclosure Statement(s) (PTO/SB/08) rr No(s)/Mail Date <u>See Co<i>ntinuation Sheet</i></u> .	6) Other:	аселе Аррисации			
S. Patent and Trademark Office						

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :05/08/2007,11/24/2006,11/17/2006.

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of claims 44-53 in the reply filed on 05/21/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 05/08/2007,11/24/2006,11/17/2006 was filed after the mailing date of the Non-Final rejection on 09/26/2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 44-48,50 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokota (US 7,042,599).

Yokota teaches:

Claim 44: a light emitting element for emitting light; light transmitting structure for forming an image on a photosensitive drum by light emitted from said light emitting element; and converting structure for converting an advancing direction of the light emitted from said light emitting element, such that said light transmitting structure is for forming the image on the photosensitive drum by the light emitted from said light emitting element after an advancing direction of the light has been converted by said converting structure (fig 5 #11 converting structure, #10 light emitting element, #12 transmitting structure).

Claim 45: said light emitting element is on a surface of a substrate so as to emit the light in a direction perpendicular to the surface, and said converting structure is on said light emitting element (fig 5 #11 converting structure, #10 light emitting element; converting structure is on light emitting element).

Claim 46: said converting structure is on a surface of a substrate, and said light emitting element is on said converting structure so as to emit the light toward said converting structure (fig 5 #11 converting structure, #10 light emitting element; the light faces the converting structure and emits light towards it).

Claim 47: said light emitting element is on a surface of a substrate so as to emit the light in a direction perpendicular to the surface, and said converting structure is on another surface of the substrate (fig 5 #11 converting structure, #10 light emitting element").

Claim 48: said converting structure is for converting an advancing direction of the light emitted from said light emitting element by converting the advancing direction of the light into a direction that is parallel to the substrate (fig 5, function of light guide #11 is to advance the light in a direction parallel to the substrate).

Claim 50: said light converting structure comprises a light guide to lead the light emitted from said light emitting element in a specific direction (fig 5 #11 is a light guide).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota (US 7,042,599) in view of Izumi (US 5,452,385).

Yokota does not teach:

Claim 49: said converting structure comprises a prism for reflecting the light emitted from said light emitting element in a specific direction.

Izumi teaches:

Claim 49: said converting structure comprises a prism for reflecting the light emitted from said light emitting element in a specific direction (fig 1 #19).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Yokota to incorporate said converting structure comprises a prism for reflecting the light emitted from said light emitting element in a

specific direction as taught by Izumi because it is a common and easy to find structure to use as a converting means that is both efficient and economical.

7. Claim 51,52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota (US 7,042,599) in view of Ishihara (US 7,154,640).

Yokota does not teach:

Claim 51: said converting structure is for converting an advancing direction of the light emitted from said light emitting element by converting the advancing direction of the light into a direction that is normal to the photosensitive drum.

Claim 52: the image writing apparatus includes photosensitive drums arranged in series.

Ishihara teaches:

Claim 51: said converting structure is for converting an advancing direction of the light emitted from said light emitting element by converting the advancing direction of the light into a direction that is normal to the photosensitive drum (fig 1 #8).

Claim 52: the image writing apparatus includes photosensitive drums arranged in series (fig 11 #21-24).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Yokota to incorporate said converting structure is for converting an advancing direction of the light emitted from said light emitting element by converting the advancing direction of the light into a direction that is normal to the photosensitive drum and the image writing apparatus includes photosensitive drums

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arranged in series as taught by Ishihara because a drum is commonly used for imaging in place of a flat document tray.

8. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota (US 7,042,599) in view of Yip (US 5,817,447).

Yokota does not teach:

Claim 53: said light emitting element comprises an organic electro luminescence material.

Yip teaches:

Claim 53: said light emitting element comprises an organic electro luminescence material (col 3 lines 1-2 "organic led arrays").

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Yokota to incorporate said light emitting element comprises an organic electro luminescence material as taught by Yip because it is inexpensive and a good source for blue light commonly used in imaging.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Al-Hashimi whose telephone number is 571 272 7159. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571 272 2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SA/

AN H. DO

PRIMARY EXAMINER

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